MEETING LOG DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT:

National Carbon Monoxide Detection Project

Technical Advisory Committee

PLACE:

National Institute of Standards and Technology

MEETING DATE: February 5, 1997

LOG ENTRY SOURCE:

Donald W. Switzer J

ENTRY DATE:

February 10, 1997

COMMISSION ATTENDEES:

Donald W. Switzer

ES

NON-COMMISSION ATTENDEES:

See attached attendance sheet

MEETING SUMMARY

The National Fire Protection Research Foundation (NFPRF) is managing the National Carbon Monoxide Detection Project. purpose of the project is to determine the proper location of carbon monoxide (CO) detectors in the home. This information will then be provided to assist in developing an "installation standard" for CO detectors. The project is being funded through donations from CO detector manufacturers and other interested parties. The purpose of this meeting was to discuss the testing program planned for Phase II, CO Mixing in Rooms, and to review the success/failure of fund raising efforts to date.

The purpose of Phase II is to determine the importance of CO detector location in a room under realistic conditions of mixing and CO emissions. Approximately 40 test cases will be examined in a $400 {\rm ft}^2$ room equipped with windows and forced air circulation. Environmental conditions that will be considered are stratified air in the room, stagnant air in the room, ventilation system on, and windows open. Testing will look at scenarios of CO entering from adjoining rooms, from an in-room heat source, and from a simulated venting failure. The information obtained will then be used in a published indoor air quality model to predict CO distribution in multi-room dwellings.

NFPRF estimates it will require seven sponsors, each contributing \$26,000, to fully fund the project. To date, funding has been received from four sources. The group discussed the likelihood of achieving necessary funding, and considered the

possibility of soliciting smaller amounts from other sources, as "associate sponsors." This option was not chosen, and the existing sponsors suggested that NFPRF send a letter to potential sponsors, including a matrix of planned testing, and request response by March 14, 1997. The TAC will meet on March 19, 1997, at which time a decision will be reached to proceed, or to terminate the program if necessary funding is not received.